COLD STORAGE LOCKER PLANTS IN OHIO

(Preliminary Report)

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C O N T E N T S

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This brief report of a study of cold storage locker plants in Ohio will be followed by a printed bulletin with more detailed analysis and comment in a short time. The purpose of this mimeograph report is to get the essential data gathered in the study to those who may be interested, with the least delay. Previously each of the 51 locker plants which furnished a list of patrons was given a one page summary report of the information given by the patrons replying to the questionnaire sent them.

LOCKER FACILITIES

Development of cold storage locker plants began in Ohio about 1936. About 80% of the present capacity has been installed since 1940. As of April 1, 1945 there were 230 plants in Ohio with about 116,000 lockers.

The information in this study was obtained from 144 locker plants and 1,385 patrons of 51 plants which furnished lists of patrons' names. The information was obtained from plants well distributed over the state, with the exception of southeastern Ohio where there were only a very few plants. The plant development to date has been mostly in the better farming areas and around three or four populous areas of the state.

More than two-thirds of the locker plants were operated in connection with some other business. In order of number, these other businesses were - grocery and meat markets combined, ice manufacturing

Cold Storage Locker Plants In Ohio As Of April 1, 1945

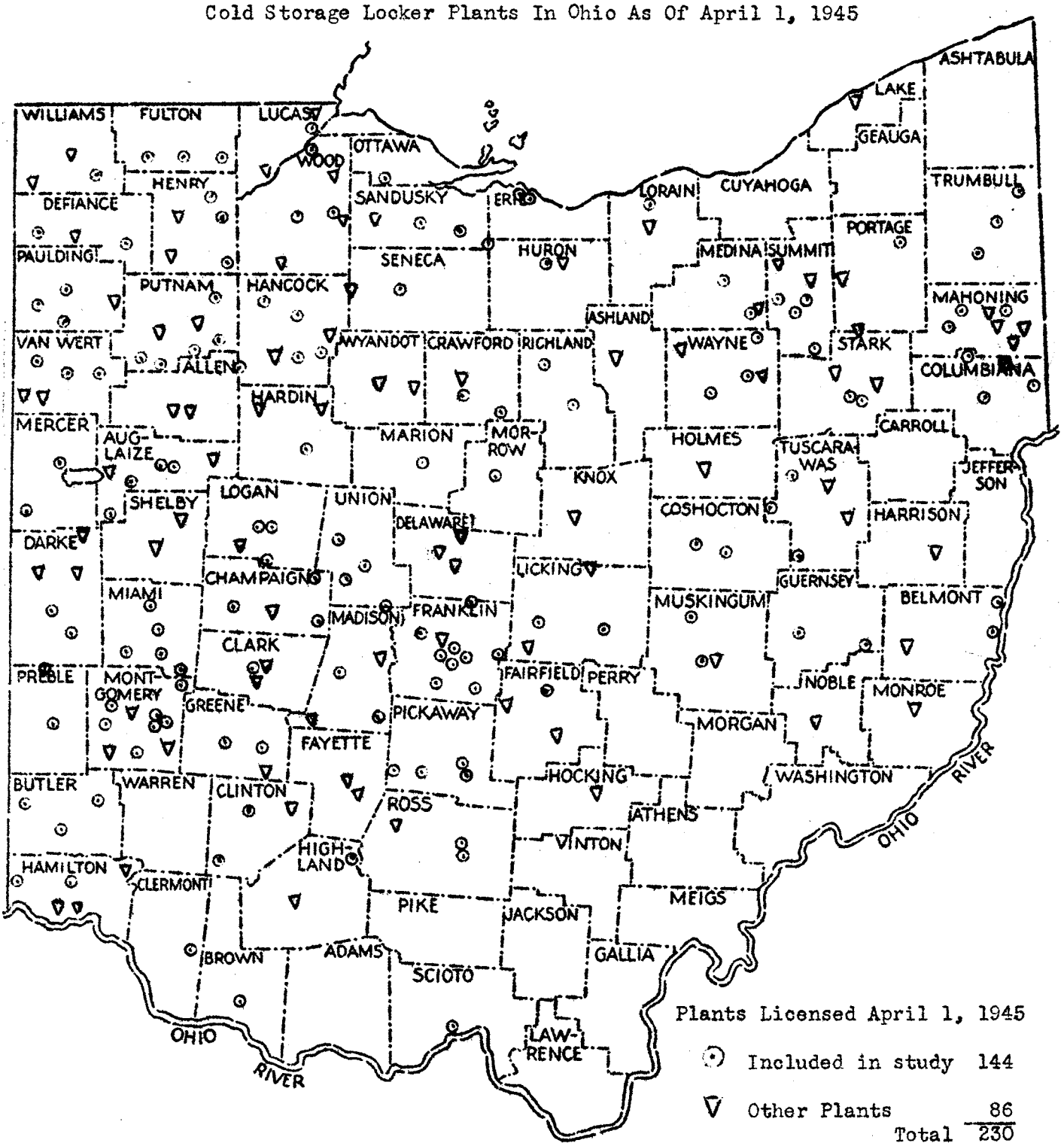

Table 1 - Number of Cold Storage Locker Plants By Year of Starting and By Type of Ownership for 144 Ohio Plants.

Ownership	Year Starting in Business											
	Before 1936	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945 (3 Months)	Not Given
Individual	-	-	1	-	2	9	20	10	4	12	3	1
Partnership	-	-	2	-	1	3	13	4	2	5	-	-
Corporation (for profit)	3	2	5	6	7	1	7	1	2	6	-	-
Cooperative	-	-	-	1	1	1	1	3	1	1	1	-
Not designated	-	-	-	-	-	-	2	-	-	-	-	-
Total	3	2	8	7	11	14	43	18	9	24	4	1

plants, meat markets alone, cold storage warehouses, grocery stores without meats, coal sales, creameries, packing plants, manufacture of ice cream, milk plants, general stores, grain elevators, electric goods, and miscellaneous other business enterprises, no one of which was operated in connection with more than one or two locker plants.

Plant Ownership

Corporations were responsible for most of the early development of cold storage locker service in Ohio. Of the 31 plants opened before 1940, 23 were started by corporations. Most of these early plants were started by corporations operating cold storage or ice manufacturing plants.

Size of Plants

The smallest of the 144 locker plants was one with 60 lockers and the largest had 3,036 lockers.

The number of lockers in the 86 plants which did not furnish data for the study was obtained from their license applications at the State Department of Agriculture. The average number of lockers per plant for these was 455.

When Lockers Were Installed

The complete record of the number of lockers installed by year was furnished by 134 of the 144 plants. These plants had a total of 70,481 lockers.

Most plants reported that all lockers had been rented and in use from time of installation. The only exceptions were a few of the plants opened from 1936 to 1939 which had some difficulty for a year or two in renting lockers.

Table 2 - Number of Cold-storage Locker Plants by Number of Lockers And Percent of Lockers in Each Group, For 144 Plants in Ohio, April 1, 1945.

Size of Plant (No. of Lockers)	Number		Percent	
	Of Plants In Group	Of Lockers In Group	Of Plants In Group	Of Lockers In Group
0 - 199	14	2,083	9.7	2.7
200 - 299	24	5,759	16.7	7.4
300 - 399	28	9,266	19.5	11.9
400 - 499	18	8,064	12.5	10.3
500 - 599	15	7,926	10.4	10.2
600 - 699	11	6,905	7.6	8.9
700 - 799	12	8,848	8.3	11.3
800 - 899	4	3,266	2.8	4.2
900 - 999	3	2,764	2.1	3.5
1000 - 1499	10	11,424	6.9	14.7
1500 - Over	5	11,618	3.5	14.9
All Groups	144	77,923	100.0	100.0

Size of Lockers and Rental Charges

The size and rental charges of lockers were reported by 140 plants. The size varied from three to nine cubic feet and the charges varied from $5 to $20 per locker.

Thirty-eight plants charged the same for door and drawer lockers of the same size while 83 charged more for the drawer than for the door type. The average difference in charge for the two types for the 83 plants was $2.59.

Table 3 - Year of Installation of Lockers in 134 Cold Storage Locker Plants in Ohio

Year Installed	Number of Lockers		Percent of April, 1945	
	Installed Each Year	Installed To Date	Installed By Year	Installed To Date
1936	305	305	.4	.4
1937	1,540	1,845	2.2	2.6
1938	1,695	3,540	2.4	5.0
1939	3,362	6,902	4.8	9.8
1940	5,159	12,061	7.3	17.1
1941	14,237	26,298	20.2	37.3
1942	12,185	38,483	17.3	54.6
1943	11,223	49,706	15.9	70.5
1944	18,875	68,581	26.8	97.3
1945 (3 Mo.)	1,900	70,481	2.7	100.0
Total	70,481	70,481	100.0	100.0

Table 4 - Number of Plants Having Lockers of Designated Capacity and Yearly Rental Charges By Capacity of Lockers.

Capacity in Cubic Feet	Number of Locker Plants Having Lockers Of Designated Capacity	Highest and Lowest Retail Charge Made On Designated Size	Arithmetic Average of Rental Charges
3 to 3.99	2	$5.00 - $7.50	6.25
4 to 4.99	6	7.50 - 12.50	10.64
5 to 5.99	14	9.00 - 13.50	11.17
6 to 6.99	116	10.00 - 18.00	12.80
7 to 7.99	16	10.00 - 16.00	12.42
Over 7.99	11	12.00 - 20.00	16.18
All Sizes	*140	5.00 - 20.00	12.68

* The total of the plants having lockers of different sizes is higher than this total number of plants since some plants have more than one size of lockers.

Slaughtering

Thirty-two of the 144 plants were furnishing slaughtering service when the information was obtained in late 1944 and early 1945. Several more plants stated their intention of adding such service just as soon as possible. Some of the 32 plants had the slaughtering facilities at the locker plant while the others did the butchering at the farm. A few additional plants had arrangements with custom butchers to furnish the slaughtering service for their patrons.

Only a few plants furnished information as to whether the hides were kept as a part of the pay for slaughtering and therefore the rather sketchy information concerning this was not included.

The returns for slaughtering would be somewhat higher than indicated by the table by the addition of the value of any hides retained as part of the slaughtering charge. Comparison of charges by head and per hundred pounds for cattle is probably misleading without knowing more about the disposition of hides.

Table 5 - Rates Charged For Slaughtering by 32 Cold Storage Locker Plants in Ohio, Late 1944 and Early 1945.

Specie	Rates By Head		Rates By Hundred Pounds	
	Highest and Lowest	Average of All Rates	Highest and Lowest	Average of All Rates
Hogs	$1.00 to $2.00	$1.58	$ .75 to $2.00	$1.21
Cattle	1.00 to 3.00	2.15	1.00 to 2.00	1.35
Veal	.75 to 1.75	1.30	1.00 to 1.75	1.25
Sheep and Lambs	.50 to 1.50	1.05	1.00 to 1.75	1.25

Processing and Other Services in the Locker Plant

The number of plants furnishing the different services and rates for the services are shown in the following table.

Twenty-seven plants reported processing meats for home cold storage unit owners and 18 plants were processing meat for patrons of other plants. Complete poultry dressing was offered by only a few plants.

Minimum charges for fruit and vegetable processing reported by 21 plants averaged 12.1 cents.

Table 6 - Rates Charged For Processing and Services Rendered By 144 Locker Plants, Late 1944 and Early 1945.

Processing Operation Or Service	Number of Plants Reporting Stated Service	Number of Plants Reporting Rate	Highest Charge Reported	Lowest Charge Reported	Average All Reported Charges
	ǂ		Cents per pound*		
Cutting, wrapping and freezing, including carcass chilling: Pork	137	129	4.0	1.0	2.28
Beef	137	129	4.0	1.5	2.32
Cutting and wrapping only	134	14	2.5	1.0	1.53
Wrap and freeze only	-	5	3.0	1.0	1.70
Quick freeze only	137	35	2.0	0.5	0.87
Wrapping only	-	3	1.0	0.5	0.67
Cutting only	-	4	1.0	0.5	0.75
Chill room only	132	21	1.5	0.5	0.83
Smoking and Curing	45	28	5.0	2.5	3.97
Lard Rendering △	38	28	5.0	0.5	2.13
Processing fruits ⊙ and vegetables	81	38	7.0	1.0	2.11
Quick freezing fruits and vegetables ◻	137	54	2.0	0.5	1.30
Grinding - for that part above the usual amt.	-	10	3.0	1.0	1.70
Grinding - Where made as extra charge in processing	-	24	3.0	1.0	1.60
Grinding - where no other processing is involved	-	6	2.0	1.0	1.83

ǂ Blanks in this column mean that accurate number not determined.

* Pints of fruits and vegetables considered as one pound.

△ One plant charged one cent per pound more to persons not renting lockers. Eight plants include lard rendering in processing charge.

⊙ Some of the charges reported for this may be for freezing only.

◻ Some of the charges reported for this may include sealing packages or placing the product in packages and sealing.

Overflow Lockers

Lockers were withheld by 59 plants for overflow use. The total number of lockers used for this purpose amounted to about 4% of all lockers. Most operators said it was desirable to have a substantial number of lockers reserved for this purpose.

Content Insurance

Insurance on contents in the locker was carried by 75 plants. Seventeen of these plants made no direct charge to the patron. The charges made by the other plants ranged from 25 cents to $6 per year. The average was 47½¢ and the most usual charge was 50¢ per year. The $6 charge was for an unusually complete contract against loss.

Amount of Food Stored in Lockers

A summary of records furnished by twelve plants relative to amount of product stored per year showed an average of 288 pounds per locker. The storage per locker per year varied from 144 to 553 pounds for the twelve plants.

PATRON USE OF LOCKER SERVICE

Of the locker patrons furnishing data for the study, 899 lived on the farm and 486 lived in town or city. Since names were taken at random from patron lists at the different plants, it is presumed that the ratio of 899 to 486 is representative for the 51 plants.

Experience With Renting of Lockers

The average length of time which all of the patrons had been renting lockers was 3.045 years. A few had been using lockers for more than eight years and nearly all had at least one year of experience renting lockers. The farm patrons had more experience than the non-farm group. This difference was accounted for mostly in the groups with over four years' experience.

Lockers Rented Per Patron

Farm users were renting an average of 1.41 lockers per patron and the non-farm users an average of 1.37 lockers. Some were renting lockers at more than one plant which would add slightly to these figures.

Table 7 - Number of Lockers Rented Per Patron By Farm and Non-farm Users in 51 Ohio Plants.

Number of Lockers Rented	Farm Users		Non-farm Users		Total	
	Number	Percent	Number	Percent	Number	Percent
* Less than 1	2	.2	--	--	2	.1
1	564	62.8	331	68.1	895	64.7
1½	7	.8	1	.2	8	.6
2	289	32.2	133	27.4	422	30.5
3	34	3.8	18	3.7	57	3.7
Four or more	2	.2	3	.6	5	.4
Total	898	100.0	486	100.0	1384	100.0

*Fractions are the result of division of lockers with another family in several instances.

Distance From Patrons' Homes to Locker Plants

Some patrons lived within one block of the plant while a few lived more than 20 miles away and two lived 35 miles away. The farm patrons as a group averaged 5.92 miles from the plants and the non-farm group averaged 3.37 miles. The average for the two groups combined was 5.03 miles.

Table 8 - Classification of 1,384 patrons of 51 Ohio Locker Plants in Ohio by Distance From the Plant Where They Had Lockers Rented.

Distance From Plant (Miles)	Farm Users		Non-farm Users		Total	
	Number	Percent	Number	Percent	Number	Percent
Less than 1 mile	25	2.8	172	35.4	197	14.3
1 to 1.99 miles	55	6.1	95	19.5	150	10.8
2 to 2.99 "	91	10.1	49	10.1	140	10.1
3 to 3.99 "	115	12.8	27	5.6	142	10.3
4 to 4.99 "	102	11.4	14	2.9	116	8.3
5 to 9.99 "	359	40.0	80	16.5	439	31.7
10 to 19.99 "	143	15.9	44	9.0	187	13.5
20 miles or more	8	.9	5	1.0	13	1.0
Total	898	100.0	486	100.0	1384	100.0

There were numerous complaints from patrons living more than five miles from the plant, which would indicate that distance to be about the maximum from which plants might expect to draw satisfied users of their service. At present about 35% of the area of the state is within five miles of a plant. However, the plants do not have sufficient facilities to serve much over ten or fifteen percent of the families living within five miles. If more than this percentage desire locker service, an expansion of facilities in the areas already served by plants within this distance would be necessary to

bring locker service within five miles of everyone desiring it. New facilities in areas beyond the five mile distance from plants would be necessary for those who desired such service.

Trips Made To Locker Plants

In the following table is a summary by month of the number of trips made to their lockers by 1,182 patrons.

Table 9 - Monthly Trips For 1,182 Cold Storage Locker Users of 51 Ohio Locker Plants For One Year.*

Month	Number of Trips For Entire Group	Average Number Per Locker User	Percent of Year's Total
January	4990	4.22	7.5
February	4983	4.22	7.5
March	5149	4.36	7.8
April	5254	4.44	7.9
May	5533	4.68	8.4
June	6042	5.11	9.1
July	6177	5.23	9.3
August	6253	5.29	9.4
September	6004	5.08	9.1
October	5464	4.62	8.2
November	5207	4.41	7.9
December	5213	4.41	7.9
Year	66269	56.07	100.0

* The year represented in most cases is from Oct. 1, 1945 to September 30, 1944.

Most of the seasonal variation comes from extra trips to the locker plant for the purpose of placing food in storage.

The number of trips made by patrons to visit their lockers was influenced by the distance they lived from the plant.

Table 10 - Number of Trips Per Year Made By Farm and Non-farm Locker Users Classified by Distance From the Locker Plant For 1,238 Patrons of 51 Ohio Locker Plants.

	Farm Users			Non-farm Users		
Distance from plant	Number of Patrons	Total Number of Trips	Trips Per Patron	Number of Patrons	Total Number of Trips	Trips Per Patron
Less than 1 mile	18	1107	61.5	149	12014	80.6
1 mile but less than two miles	51	3570	70.0	83	5008	60.3
2 miles but less than 3 miles	81	5022	62.0	44	2739	62.2
3 miles but less than 4 miles	104	5990	57.6	24	1103	46.0
4 miles but less than 5 miles	91	5249	57.7	16	700	43.8
5 miles but less than 10 miles	330	16365	49.6	71	3007	42.4
10 miles but less than 20 miles	125	4915	39.3	38	1122	29.5
20 miles or more	8	243	30.4	5	104	20.8
Total	808	42461	52.6	430	25797	60.0

Farmers made fewer trips to the locker plant than the city and village patrons. On the average, the non-farm patrons lived two and one-half miles closer to the plant where their lockers were rented which likely accounts for the difference in number of trips made.

About 20.5 percent of the driving involved in going to the locker plants was done with no other errand in mind. This meant an average of 101.7 miles per locker user per year.

Future Use of Lockers

In Table 11 is the summary of the expressed intentions of the patrons as to their future use of lockers for storage of meat, vegetables, poultry, and fruit.

Table 11 - Intentions As To Future Use of Locker Storage of Selected Products By Farm and Non-farm Users of 51 Ohio Locker Plants.

Amount Which Users Intend To Store In Future	Farm Users				Non-farm Users			
	Meat	Vege-tables	Poultry	Fruit	Meat	Vege-tables	Poultry	Fruit
	Number				Number			
More	118	249	114	279	122	137	87	157
Less	21	28	30	19	38	43	37	27
Same	739	529	632	510	299	264	296	255
None	5	42	44	42	8	13	25	18
No Information	16	51	79	49	19	29	41	29
Total	899	899	899	899	486	486	486	486
	Percent				Percent			
More	13.1	27.7	12.7	31.0	25.1	28.2	17.9	32.3
Less	2.3	3.1	3.3	2.1	7.8	8.8	7.6	5.5
Same	82.2	58.8	70.3	56.7	61.5	54.3	60.9	52.5
None	.6	4.7	4.9	4.7	1.7	2.7	5.1	3.7
No Information	1.8	5.7	8.8	5.5	3.9	6.0	8.5	6.0
Total	100.0	100.0	100.0	100.0	100.0	100	100.0	100.0

The very small percent who said they would store less or more of the different products is an indication of general satisfaction with cold storage preservation of food. This does not measure the future for the entire locker industry. It is a measure only of what those people who have been using lockers expect to do in the future.

Table 12 - Number and Percent of Locker Users of 51 Ohio Plants Classified By Method They Expect To Use in Obtaining Products For Storage in Lockers.

How Locker Users Expect to Obtain Products For Lockers	Farm Users			Non-farm Users		
	Meat	Vegetables	Fruit	Meat	Vegetables	Fruit
Grow own	816	798	395	159	301	116
Buy	19	16	258	273	126	279
Grow part and Buy Part	42	21	173	36	37	65
None or no information	22	64	73	18	22	26
Total	899	899	899	486	486	486
	Percent			Percent		
Grow own	90.8	88.8	43.9	32.7	62.0	23.9
Buy	2.1	1.8	28.7	56.2	25.9	57.4
Grow Part and Buy Part	4.7	2.3	19.3	7.4	7.6	13.4
None or no information	2.4	7.1	8.1	3.7	4.5	5.3
Total	100	100.0	100.0	100.0	100.0	100.0

The fact that most farm locker patrons and about one-third of the non-farm locker users will produce their own meat for storage is important since

it means that a great variety of qualities of meats will be stored. This is also true to a great extent with respect to vegetables.

Addition of Slaughter and Curing Service

Patrons of those plants which did not furnish slaughtering or curing facilities were asked whether or not they would like to see such services added. Of the farm patrons, 317 said they would like to have slaughtering done by the locker plant, and 121 said they would not care for it. Of the same group, 267 would like curing service furnished and 108 would not care for it.

Of the non-farm group, 178 wanted slaughtering service and 142 wanted curing service. Seventy-one said they were not interested in slaughtering service and 50 were not interested in having curing service offered by the plant.

Purchase of Home Cold Storage Units

Each patron was asked whether or not they intended to purchase home freezer units when they became available. The answers are summarized in Table 13.

Table 13 - Intentions of Locker Users of 51 Ohio Plants Concerning the Purchase of Home Units When They Become Available.

	Intentions							
	Will Purchase		Will not Purchase		Undecided and Miscellaneous		No Answer	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Farm Users	457	50.9	214	23.8	172	19.1	56	6.2
Non-farm Users	276	56.8	112	23.0	81	16.7	17	3.5
Total	733	52.9	326	23.5	253	18.3	73	5.3

Those patrons who expected to purchase units were asked what they would be willing to pay for the unit they specified as the desirable size for their use.

Table 14 - Number of Prospective Home Unit Purchasers From a Representative Group of Locker Users of 51 Ohio Plants By Size of Unit They Specified and Average Maximum Price They Would Be Willing To Pay.

Size	Farm Users		Non-farm Users		Total	
	Number Stating Size and Price	Average of Maximum Prices Stated	Number Stating Size	Average of Maximum Prices Stated	Number Stating Size and Price	Average Of Maximum Prices Stated
5 cubic feet	12	$171.67	19	$210.53	31	$195.48
10 " "	89	236.24	54	247.59	143	240.52
15 " "	45	327.78	25	384.00	70	347.86
15+ " "	25	411.00	12	541.67	37	453.38
Combination refrigerator and cold storage unit	30	272.50	13	263.46	43	269.78
No size designated	5	170.00	2	150.00	7	164.29
Total	206	$277.35	125	$297.56	331	$284.99

The average of the maximum prices they stated and the range of prices stated is given in Tables 14 and 15. Table 15 is of importance in that it shows how many prospective purchasers might be expected to come into the market at different price levels. Only 18 stated maximum prices of $125 or less.

Processing At Plant For Those Who Expect To Purchase Home Units

Plant operators are very much interested in processing as a source of income. Those patrons who expect to purchase a home unit were asked how much

Table 15 - Number of Prospective Home Unit Purchasers From a Representative Group of Locker Users of 51 Ohio Plants By Size of Unit Specified and By Maximum Price Stated.

Size	Maximum Prices Stated							
	Farm Users				Non-farm Users			
	$0 to $124.99	$125.00 to $199.99	$200.00 to $299.99	$300.00 and Over	$0 to $124.99	$125.00 to $199.99	$200.00 to $299.99	$300 and Over
5 cubic feet	3	6	2	1	1	6	7	5
10 " "	3	20	42	24	5	12	17	20
15 " "	2	4	10	29	1	0	8	16
15+ " "	0	1	1	23	0	0	1	11
Combination refrigerator and cold storage unit	0	9	12	9	1	0	7	5
No size designated	1	1	3	0	1	0	1	0
Total	9	41	70	86	9	18	41	57

of their processing they would have the locker plant do for them when they had their own units.

Table 16 - Amount of Meat Processing Which 784 Locker Users of 51 Ohio Plants Stated They Would Have Done at the Locker Plant if They Purchased Home Units.

Amount	Farm Group		Non-farm Group		Total	
	Number	Percent	Number	Percent	Number	Percent
All	140	27.6	143	51.6	283	36.1
Part	110	21.7	44	15.9	154	19.6
Same as before	13	2.6	4	1.5	17	2.2
None	244	48.1	86	31.0	330	42.1
Total	507	100.0	277	100.0	784	100.0

There was considerable difference between what the farm and non-farm groups expect to do in this respect.

Comments By Locker Patrons

Of the 1,259 who made statements concerning satisfaction with locker storage of food 1,182 said they were satisfied and 77 said they were not satisfied. Those who were not satisfied said it was due to off-flavored foods, or lockers were too expensive, or management was poor or no advantage could be seen in cold storage lockers. Some of this group had already discontinued the use of cold storage lockers.

The advantages of frozen food lockers mentioned most often were - (1) assurance of fresh food throughout the year, (2) assurance of quality food, (3) ease of preparation of food for storage (4) less waste than in canning and curing (5) saving by purchasing in wholesale quantities or from less

spoilage, (6) saving of home-grown products, (7) convenience of food supply and (8) variety of food to select from.

Beef was by far the most satisfactory meat from frozen storage judging from comments by patrons. Eighty-one patrons volunteered the information that pork from cold storage lockers was unsatisfactory and many more said that pork was not good after three months. About the same number thought poultry was good from storage as thought it was not so very good or poor.

Corn, peas, limas, green and wax beans, asparagus, broccoli, rhubarb, and spinach were the vegetables mentioned most frequently as well liked from storage. Partially offsetting the favorable comments for some of these vegetables were the complaints of others that green beans, corn, peas, limas, asparagus, and beets had proven unsatisfactory.

Especial satisfaction with storage of strawberries, cherries, peaches, red raspberries, blackberries, and grapes was claimed by many users. Unfavorable comments were made by a few patrons with respect to peaches, strawberries, black raspberries, pears, plums, grapes, cherries, and blackberries. Unfavorable comments were fewer than half the favorable comments.

Following is a tabulation of the recommendations made by patrons for improvement of locker plants and their service.

Other suggestions were for better containers, more expert processing, more care in handling keys and a better system of checking food in and out of lockers.

A few complaints were voiced of charges being too high for quick freezing and a few mentioned that the plant should be kept cleaner. Other complaints were that lockers were too expensive to be real successful yet, that floors in locker room were unsafe, and that there should be overflow space available.

Recommendations	Number of Times Stated
Plant closer home	157
Home unit -- either to displace or supplement locker	134
Lower locker rental charge	128
Better management or better and more plant help	110
Addition of curing or slaughtering service	97
More convenient lockers both as to access without ladder and as to getting food out	73
Keep plant open more hours (especially during summer)	71
More care not to mix different patron's products and protection against theft	62
Have choice of varied sizes of lockers	30
Meat for sale by locker plant	25
Lower processing charge	25
Addition of fruit and vegetable processing service	23
Reduce plant odors in foods	21
Education and information on preparation of food for storage	19
Access to locker in warm room	18
Addition of delivery service	9
More courteous treatment	9
Cooperatively owned lockers	7
More quick freeze capacity	4

FUTURE PROSPECTS FOR LOCKER PLANTS IN OHIO

From information gathered in connection with this study, it is certain that increased growth can be expected in locker plants even with the coming development of home cold storage units. The war has stimulated interest in frozen foods to the place where facilities have been entirely inadequate to supply the demand. Almost every plant has a waiting list for lockers which makes the future look bright for expansion in size of present plants and in the addition of many new plants.

Caution should be observed when materials are again available in unlimited amount for building or expanding, that there does not occur an over-expansion of lockers beyond the real demand. Two things point to the need for caution. First, it appears that a large number of present locker patrons wish to have home units and a large number of these may no longer retain lockers. Second, retail stores may expand and improve the sales of frozen products in such a way as to compete seriously with the storage in lockers.

Demand for processing of meats, from slaughtering to curing, will no doubt increase with the increase of home unit use and can become the most important source of locker plant income if developed properly.

More attention should be given in the future to efficiency of plants, both as to their size and as to their operation. Rates for processing services will have to be such as not to invite too much competition from other sources for that business. Much of the future success of the locker plants depends on their ability to operate efficiently at the same time they are rendering satisfactory and courteous service. Too much dependence should not be placed on the fact that many people without locker service say they would like to have it.

If the development of locker service in other states can be taken as a measuring stick for Ohio, it would indicate a place for considerable

increase in facilities in rural areas. In areas where electric power is available to most farmers, the home units will claim a good portion of the increase in facilities since they are more convenient as far as driving is concerned than lockers at plants.

A complete survey of the need for a new locker plant or the expansion of an existing one would go a long way in insuring success of such projects. Such an analysis should take into consideration the competing plants already in existence, the number of prospective patrons, the number of patrons of existing plants who expect to purchase home units and thereby release lockers for others and the services which prospective patrons desire. If this sort of analysis or survey is carefully made, it will be of much help, not only to the individual plant but to the cold storage industry of the state as well. Without such analysis many locker plants can be expected to experience difficulties in operation or even complete failure.